

An Exelon Company

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March 27, 2018

PUBLIC

Ms. Brinda Westbrook-Sedgwick Commission Secretary Public Service Commission of the District of Columbia 1325 G Street, N.W., Suite 800 Washington DC, 20005

Re: Formal Case No. 1050

Dear Ms. Westbrook-Sedgwick:

Enclosed please find the public portion of Potomac Electric Power Company's Annual Interconnection Report for 2017, pursuant to Section 4008.5 of Title 15 of the District of Columbia Municipal Regulations, as well as Order No. 17379 issued February 12, 2014 in this proceeding by the District of Columbia Public Service Commission. Confidential portions of this filing are being provided under separate cover.

Please feel free to contact me if you have any further questions.

Sincerely,

Andrea H. Harper

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Enclosures

cc: All Parties of Record



F.C. 1050 - Compliance Report for Pepco Covering Interconnection Applications Received January 1, 2017 through December 31, 2017 (Filed March 27, 2018)



I. Introduction

Pursuant to § 4008.5 of Title 15 of the District of Columbia Municipal Regulations (DCMR), as well as Order Nos. 17379, 18113 and 18575 issued on February 12, 2015, February 29, 2016, and October 17, 2016, respectively, by the Public Service Commission of the District of Columbia (Commission), Potomac Electric Power Company (Pepco or the Company) submits its Annual Interconnection Report for 2017 (2017 Report).

II. Background

On February 13, 2009, the Commission promulgated the District of Columbia Small Generator Interconnection Rules (DCSGIR) setting forth the procedures and standards for customers with on-site generation to interconnect with Pepco's electric distribution system. The DCSGIR requires, among other things, that Pepco maintain and track the Company's progress in implementing interconnections in the District of Columbia. On March 29, 2013, Pepco filed its Annual Interconnection Report for 2012 (2012 Report). On February 12, 2015, the Commission issued Order No. 17379, accepting Pepco's 2012 Report, incorporating Pepco's data responses into the record, and directing certain modifications to Pepco's Annual Interconnection Report for 2013 and subsequent reports.

On March 30, 2016, Pepco filed its Annual Interconnection Report for 2015 (2015 Report). On February 1, 2016, Pepco responded to the Commission's January 19, 2016 Data Request No. 7, and on February 29, 2016, the Commission issued Order No. 18113 entering the responses to Data Request No. 7 into the record and directing Pepco to make certain modifications to its Annual Report, beginning with the March 30, 2016 report.

On March 23, 2016, in Formal Case No. 1119, the Commission issued Order No. 18148 which approved the merger of Pepco and Exelon and accepted settlement commitments to improve the interconnection process in the District. On March 30, 2016, Pepco filed its Annual Interconnection Report for 2016 (2016 Report). On May 13, 2016, Pepco responded to the Commission's April 21, 2016 Data Request No. 8, and on October 17, 2016, the Commission issued Order No. 18575 directing Pepco to make certain modifications to its Annual Report, beginning with the March 30, 2017 report.

III. 2017 Report

A. <u>Information Required by Section 4008.5</u>

Section 4008.5 of the DCSGIR requires Pepco to submit to the Commission, within 90 days of the close of each year, a report detailing the following: (1) the total number of and the nameplate capacity of the interconnection requests received, approved, and denied under Level 1, Level 2, Level 3, and Level 4 reviews; (2) the number of interconnection requests not processed within the timelines established in the DCSGIR; and (3) the number of scoping meetings held and the number of feasibility studies, impact studies, and facility studies performed and the fees charged for these studies.

This section is written to comply with § 4008.5 of the DCSGIR.

1. In compliance with § 4008.5 (a) the Company reports, the total number of and nameplate capacity of complete interconnection requests received, approved, and denied under Level 1, Level 2, Level 3, and Level 4 reviews:

a. Interconnection Requests Received and Deemed Complete

In 2017, Pepco received and deemed complete 6731 Level 1 requests, 168 Level 2 requests, one Level 3 request and two Level 4.

The total kWAC inverter nameplate capacity for the all requests received and deemed complete in 2017 was 26,131.54 kWAC. Exhibit A provides details on the interconnection requests received and deemed complete by Pepco in 2017.

b. Interconnection Requests Approved to Install

Pepco approved 825^2 small generator interconnection requests for installation. The total kW^{AC} inverter nameplate capacity for requests approved in 2017 was 17,900.69 kW^{AC} .

Pepco approved 670^3 Level I interconnection requests for installation in 2017, with a total inverter nameplate capacity of 3,213.86 kW^{AC}.

The Company approved 154 Level 2 applications for installation in 2017.⁴ The total inverter nameplate capacity for all Level 2 requests approved for installation was 14,665.33 kW^{AC}.

Pepco received and approved one Level 3 application for installation in 2017. The total inverter nameplate capacity for this Level 3 request was 21.50 kW^{AC}.

Pepco did not approve any Level 4 interconnection requests in 2017.

Five Level 1 applications, 22 Level 2 and two Level 4 applications (for a total of 29) were pending technical screening, as of December 31, 2017. Exhibit A provides further details on interconnection requests approved for installation in 2017.

c. Interconnection Requests Denied

Two Level 1 and one Level 2 applications failed one or more screens and were denied as submitted. The Level 2 application was revised, resubmitted and subsequently approved for operation. The two Level 1 applications did not reapply.

2. In compliance with § 4008.5(b), the Company reports the number of

¹ Total applications submitted and deemed complete decreased 19% compared to 2016.

² This number includes 15 requests received in 2016 and approved in 2017.

³ This number included 3 Level 1 requests received in 2016 and approved in 2017.

⁴ This number includes 12 Level 2 requests received in 2016 and approved in 2017.

interconnection requests not processed within the timelines established in the rules:

a. Timeliness of Application Reviews for Completeness

Pepco completed the initial review for completeness for 100% of the 1,082 interconnection requests received during 2017 within the required timeframe.

b. Timeliness of Application Reviews for Approval to Install

In 2017, Pepco completed 97.06% of the 825 Approval to installs (ATI) within the required timeframe. This represents an improvement over last year.

In an effort to further reduce application processing times and improve performance, the Company explanded it streamlined engineering review process to include projects up to 50kW. To qualify for streamlined review, projects must have inverter ratings of 50 kW^{AC} or less and meet other technical requirements. Since implementation, the vast majority of applications have been approved through the streamlined review process. The Company continues to seek ways to further streamline the interconnection process and reduce application processing times.

3. In compliance with § 4008.5(c) the Company reports, the numbers of scoping meetings held and feasibility studies, impact studies, and facilities studies performed and any fees charged for such studies:

Scoping meetings and studies are only necessary if an internal Pepco review determines that a specific interconnection request may cause an adverse impact on either Pepco's distribution system or on the reliability of electric service for customers on Pepco's distribution system. Pepco conducted two feasibility studies in 2017.

B. Requirements from Order No. 17379

The Commission directed Pepco to separately report: (1) any applications processed through the completeness review and deemed incomplete; (2) the reason(s) why each application is incomplete; and (3) a breakdown of application level. This section is written to comply with Order No. 17379.

1. Interconnection Requests Deemed Incomplete

In 2017, the Company received and reviewed 238 interconnection requests that were deemed incomplete during the completeness review process and returned them to the customer and contractor for revisions. Of the 238 applications deemed incomplete, 172 were Level 1 requests 65 were Level 2 and one Level 3. A complete list of incomplete application reasons is shown in Table (ii) of Exhibit B.

During the fourth quarter of 2017, Pepco launched a number of enhancements to its online application tool that are expected to significantly reduce the number of incomplete applications

and futher improve customer experience. These enhancements included the following:

- Auto-population of customer and contractor information
- Automated sizing validation compared to annual baseline consumption data
- Inverter manufacturer and model dropdown list
- Automated calculation of system component sizing
- Automated check for circuit restrictions and
- Copy/resubmit functionality for application revisions.

These enhancements to the online application portal are expected to lead to shorter technical review and approval times, reduced incomplete applications, and improved adoption of the online application portal.

2. Exhibits A and B

Historically, Pepco has included an Exhibit A to consolidate interconnection compliance and statistics reporting in one table. In 2015, Order No. 17379 required modifications to Exhibit A. Specifically, the Commission directed Pepco to: (1) exclude incomplete applications from the total number of applications with reviews completed within the required timeframes; (2) include only first-time applications in the total number of applications with reviews completed within the required timeframe; (3) provide the total number of applications received; (4) provide the total number of applications approved to install; (5) provide the total number of applications denied; (6) provide the total number of applications withdrawn prior to approval. On January 29, 2016, Order No. 18113, the Commission also directed Pepco to include a category that captures the number of unauthorized interconnections on an annual basis.

In compliance with the Commission's requirements to modify Exhibit A, Pepco delineated its interconnection statistics into Exhibits A and B, with Exhibit A showing all interconnection requests in 2017 reviewed, processed, deemed complete, approved, and unauthorized interconnections, and Exhibit B showing statistics on all incomplete requests processed.

In 2017, Pepco processed 1,082 interconnection requests, including 238 incomplete requests, this represents a 15% decrease from 2016. Only two interconnection requests were withdrawn prior to receiving the Company's approval to install.

In 2017, Pepco had no unauthorized interconnection to the Commission's Office of Compliance and Enforcement.

C. Requirements from Order No. 18113

The Commission directed Pepco to: (1) add an additional table similar to that which was provided in Commission Data Request No. 5, Question 14; (2) provide more detailed information as to why customers decided not to proceed with an interconnection project after scoping meetings; and (3) submit a confidential document listing Levels 2, 3, and 4 interconnection projects approved during the reporting year.

1. Exhibit C

In compliance with the Commission's requirement to include additional Interconnection Requests and Application statistics, Pepco has delineated supplemental interconnection statistics in Exhibit C, which identifies all interconnection requests received and deemed complete, approved to install, under review on December 31, 2016, under review on December 31 2017, withdrawn prior to approval, denied and not resubmitted, and revised after approval to install.

2. Applications Withdrawn After Scoping Meeting

In 2017, Pepco held 0 scoping meetings with contractors and developers interested in exploring the feasibility of potential interconnection projects.

3. List of Interconnections Approved in 2017

In compliance with the Commission's requirement to provide a confidential listing of interconnection applications approved during the 2017 reporting year, Pepco has provided Exhibit D (CONFIDENTIAL), which identifies the approved Level 2 and Level 4 requests by customer name, address, fuel type, and kW^{AC}.⁵

D. Requirements from Order No. 18575

The Commission directed Pepco to (1) provide a distribution of response time to customer calls. In addition, with respect to incomplete applications (2) distribution of the number of days required from the first submission of an incomplete application to final approval; (3) an explanation of whether resubmitted applications have any priority compared to other new applications; and (4) additional changes Pepco plans to implement to further improve the interconnection application process.

1. Distribution of Response Time to Customer Calls

Pepco's Green Power Connection (GPC) team received 2,859 customer calls related to the interconnection process in 2017. Nighty-eight (98) percent or 2,809 of these calls were answered live by a member of the appropriate process group on the GPC team. The remaining 50 calls were routed to voicemail with an average response time of less than one business day. Customers are typically routed to voicemail when attempting to contact the GPC team outside of normal business hours or during periods of high call volume when all Account Representatives are assisting other customers. The following table provides a distribution of response times to customer calls that were routed to voicemail.

⁵ No Levels 3 applications were approved to operate in 2017.

Distribution of Response Time to Customer Calls in 2017							
Within 24 hours	Within 24 Greater than Greater than 24 hours but not exceed not exceed hours 48 hours 72 hours 72 hours						
43	4	2	1				

2. Distribution from First Submission of an Incomplete Application to Final Approval

Distribution of the Average Number of Business Days from First Submission to Final Approval									
Process step	Acknowledgment of Incomplete Application	Resubmission	Acknowledgment of Complete Application	Approval to Install	Submission of Part 2	Authorization to Operate	Total Processing Time from First Submission		
Responsibility	Company	Customer	Company	Company	Customer	Company	Company and Customer		
Avg. Processing time	.97	13.3	4	7	44.45	9.04	78.76		

In 2017, Pepco issued the final authorization to operate in an average of 78.76 business days from the date of first submission of an incomplete application. As shown in the table above, the interconnection process includes a number of steps for which the processing time is outside the Company's control. The data indicates the end-to-end processing time from first submission to final authorization to operate took 11.98 business days longer (on average) than applications deemed complete on first submission. Customers receiving an incomplete notification resubmitted application documents in an average of 13.3 business days from the date of the incomplete notification. While resubmitted applications are not treated with priority compared to new applications, the Company found that the average number of business days required (44 verus 56) for Part 2 submission was 21% shorter for incomplete applications compared to complete applications.

The Company has implemented enhancements to the online application portal during the fourth quarter of 2017, focused on further reducing the rate of application incompletion. These enhancements include auto-population of customer and contractor information, automated sizing validation and including a dropdown list for inverter manufacturer and model numbers. The enhancements are expected to significantly reduce or eliminate incompletion due to Missing/Incorrect Customer Information; Incorrect Inverter Information; and Proposed AC Inverter/System is Oversized per history.

3. Re-submitted Applications

When an application has been deemed incomplete, the customer and contractor are sent an email notification identifying the deficiencies and advising the customer to reapply. Each application submission is considered a new request and all applications (including resubmitted applications) are processed in the order received. Resubmitted applications are not processed with any priority over other newly submitted applications.

4. Future Improvements to the Interconnection Process

In 2018, Pepco has launced a number of initiatives that focus on improving understanding of the solar customer journey and identifying and sharing industry best practices amongst the Exelon utilities. Through these initiatives Pepco will establish premier solar customer experience by providing a customer- and developer-facing platform that will take customers through the complete solar journey from education and evaluation through interconnection and operation.

IV. Customer Education and Outreach

Pepco continues to support renewable energy and partners with its customers to ensure safe and reliable interconnection of renewable energy to the electric grid. Pepco's enhanced outreach and education strategy includes webinars, bill inserts and in-person meetings with solar contractors aimed at further improving our customers understanding of and satisfaction with the interconnection process.

In 2017, Pepco created a Solar and Distributed Energy Resources Advisory Council (the Council) with the purpose of enhancing the relationship and collaboration between the Company and stakeholders with an interest in the implementation and expansion of solar and other Distributed Energy Resources (DER). On March 29, 2017, Pepco hosted its first Solar and Distributed Energy Resources Advisory Council (DER Council) meeting.

The Council meets twice per year to discuss solar and other DER topics relevant to the utility industry, the Company, and Pepco customers. Through this DER Council, the Company is working to engage stakeholders to help improve communication; education and outreach and to continue to improve and evolve the interconnection process and identify innovative technologies that can enhance DER for all customers.

The Company has used feedback, suggestions and recommendations from the DER Council meetings to help influence communication tactics and key messages to customers, and influence strategic direction related to DER.

The Company incorporated feedback from the DER Council session, including updating the acceptable inverter lists to the California lists of acceptable inverters. This list provides a more comprehensive resource of inverter information, which has been evaluated by the California energy commission and found to meet minimum safety and performance standards. The list was posted to Pepco's website and was updated at the end of each quarter of 2017. The inverter is a component of each renewable generating project that the Company evaluates for interconnection

requests. The Institute of Electrical and Electronics Engineers (IEEE) Standard 1547 provides the criteria and requirements for interconnecting small generator equipment to the grid, and the Underwriters Laboratory (UL) Standard 1741 sets the requirements for the inverters and charge controllers used in photovoltaic (PV) systems. In most cases, inverters that comply with both the IEEE 1547 and UL 1741 standards will be acceptable for interconnection. The Acceptable inverter list identifies equipment accepted for use on other small generator interconnection projects. The list is posted online and updated each quarter for customers use when considering a small generator interconnection project.

Pepco posted an interactive hosting capacity map online in the first quarter of 2017 and has updated that map every quarter in 2017. The hosting capacity map gives an indication of how much generation (expressed in kW) can be added to a feeder before the feeder reaches capacity or other limitations that reduce the reliability of service to electric customers on the feeder.

Pepco issued a bill insert to all customers in April 2017 entitled, "Helping You Go Solar," which shared key considerations, advantages of going solar, and useful tools. The Company also included an article in the Summer 2017 edition of the Lines customer newsletter advertising our "Solar 101" customer webinar. The Company also promoted the webinar via its social media channels (Facebook and Twitter) in June.

On June 28,2017 Pepco hosted the "Solar 101" customer webinar, where customers learned more about Pepco's Green Power Connection team and the interconnection process, Pepco's WattPlan service, NEM billing and useful tools and resources. The Company also launched The Source (thesource.pepco.com), an external content hub for customers that includes information on solar interconnection. The presentation and educational materials discussed above can also be found in the "Webcast, Education, and Publications" section in the left navigation bar at Pepco.com/gpc/md.

Pepco hosted the second annual Solar and DER Stakeholder Collaborative session on September 19, 2017. The Company presented on topics including, DER technical considerations, Smart Grid and the Utility of the Future, the GPC interconnection Application process, and Communications updates. The Company also released a new video on The Source, entitled "Helping More Customers Go Solar".

V. Timeliness of Application Review for Authorization to Operate

Timeliness of Authorization to Operate (ATO) is defined by the Company as the time from receipt of a complete Part II Request to the time the ATO letter is emailed to the customer. Pepco issued 715 ATO letters to customers in 2017, a decrease of 12% from 2016. The Company issued 98.85% of the Level 1 ATOs within the 20 business day timeframe for Level 1 interconnections in the Notice of Proposed Rulemaking currently pending before the Commission. The requirement originated in Formal Case No. 1119 in order No. 18148.

VI. General Discussion of Interconnections within the District of Columbia and Actual or Proposed Pepco Changes in Policy or Procedures

Throughout the year, Pepco continued to impliment process improvements intended to further improve customer experience and increase process efficiencies. During the first quarter of 2017, the Company posted an interactive hosting capacity map that gives customers an indication of the amount of generation that can be added to a feeder before reached capacity. Pepco also expanded its streamlined engineering review process to include projects up to 50kW^{AC}. Projects must have an inverter nameplate capacity of 50kW^{AC} or less and meet other technical requirements to qualify.

During the fourth quarter of 2017, Pepco implemented additional enhancements to the online application portal.

These enhancements included the following:

- Auto-population of customer and contractor information
- Automated sizing validation compared to annual baseline consumption data
- Inverter manufacturer and model dropdown list
- Automated check for circuit restrictions and
- Copy/resubmit function for application revisions

The combination of these technical improvements and system enhancements are expected to drive further reductions in the technical review and approval times, fewer incomplete applications and improved adoption of the online application portal. Pepco continues to seek ways to enhance the interconnection process and improve our customer experience.

EXHIBIT A

2017 Interconnection Requests and Application Statistics

Potomac Electric Power Company Public Service Commission of the District of Columbia FC1050 - Implementation of Interconnection Standards in the District of Columbia, 15 DCMR § 4008.5 **(6) (1) (2)** (3) **(4) (5) Total Applications** Total **Total** Total Total Total Received Complete **Applicati Denied Applications Incomplet** Application **Total** and Incomplete **Applicati Still Pending** Resubmissi **Applicatio** Withdrawn **Approved** ons ons to Install Prior ns Approval 1,082 825 3 29 238 2 220

Status	Number of Interconnection Applications							
Status	Level 1	Level 2	Level 3	Level 4	Total			
Received & Deemed Complete	673	168	1	2	844			
Approved to Install ⁶	670	154	1	0	825			
Under Review as of 12/31/17	5	22	0	2	29			
Denied	2	1	0	0	3			
Review Deadline Missed	0	0	0	0	0			
Approval Deadline Missed	4	20	0	0	24			
Scoping Meetings	0	0	0	0	0			
Impact Studies	0	0	0	0	0			
Facility Studies	0	0	0	0	0			
Feasibility Studies	0	2	0	0	0			
Fees Charged for Studies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
Unauthorized Interconnections	0	0	0	0	0			

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 $^{^{\}rm 6}$ Includes 29 applications received in 2017 and approved in 2018.

Status	Nameplate Capacity (kW ^{AC})						
	Level 1	Level 2	Level 3	Level 4	Total		
Received	3,216.84	16,463.20	21.50	6,430.00	26,131.54		
Approved	3,213.86	14,665.33	21.50	0	17,900.69		
Denied	7.71	93.24	0	0	100.95		

EXHIBIT B

2017 Incomplete Interconnection Requests and Application Statistics

(i) Timeframes for total incomplete applications received (all Levels)

	Incomplete Applications and Number of Business Days to Respond per Level							
Level	0 Days (Same Day)	1-3 Days	4-6 Days	7-9 Days	10 Days	Greater than 10 Days	Total	
1	46	126	0	0	0	0	172	
2	11	54	0	0	0	0	65	
3	1	0	0	0	0	0	1	
4	0	0	0	0	0	0	0	
Total	58	180	0	0	0	0	238	

(ii) Reasons for Incomplete Application Data

Reasons For Incomplete Application Data[1]Number ApplicationsMissing or Incorrect Customer Information112Incorrect Inverter AC Capacity87Duplicate or Erroneous Submission14Proposed AC Inverter/System is Oversized per History32Wrong Application Form Used5

[1] Screening results for interconnection applications may be deemed incomplete for more than one (or a combination of) reasons shown. Therefore, these requests do not equal the total number of application deemed incomplete as shown in table (i).

(iii) Incomplete Applications Excluding Re-Submissions

Level	Number of Applications
1	12
2	6
3	0
4	0
Total	18

EXHIBIT CSupplemental Interconnection Request and Application Statistics

Applications	Level 1	Level 2	Level 3	Level 4	Total
Total received and deemed complete in 2017	673	168	1	2	844
Approved to install in 2017	670	154	1	0	825
Under review as of 12/31/2016	<3>	<12>	0	0	<15>
Under Review as of 12/31/2017	5	22	0	2	29
Withdrawn prior to approval	0	2	0	0	2
Denied	3	0	0	0	3
Total	675	166	1	2	844
Applications revised after Approval to Install	36	22	0	0	58

CERTIFICATE OF SERVICE

I hereby certify that a copy of the public portion of Potomac Electric Power Company's Annual Interconnection Report for 2017 was served this March 27, 2018 on all parties in Formal Case No. 1050 by electronic mail, hand delivery or first class mail, postage prepaid.

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